

WHAT IS CLAIMED IS:

1. A semiconductor power module comprising:

a metallic base;

an insulating substrate fixedly laminated on the
5 metallic base, the insulating substrate including a plate-
like insulating body and a surface conductive layer fixedly
laminated on a surface of the plate-like semiconductor body
via a surface side fixing member;

a power semiconductor element mounted on the
10 insulating substrate; and

an electrode terminal plate fixed to the insulating
substrate via a joint portion,

wherein the surface side fixing member includes: a
first fixing portion for fixing one part of the surface
15 conductive layer located underneath the joint portion of
the electrode terminal; and a second fixing portion for
fixing the other part of the surface conductive layer which
is not located underneath the joint portion, and

wherein a fixing strength exhibited by the first
20 fixing portion is smaller than that exhibited by the second
fixing portion.

2. The semiconductor power module as claimed in Claim
1, wherein the first fixing portion is formed by providing
25 a fixing member only on its peripheral portions while its

central portion is formed as an unfixed clearance portion.

3. The semiconductor power module as claimed in Claim 1, wherein a boundary portion between the first fixing
5 portion and the second fixing portion is tightly sealed.

4. The semiconductor power module as claimed in Claim 2, wherein a boundary portion between the first fixing
portion and the second fixing portion is tightly sealed.
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5. The semiconductor power module as claimed in Claim 1, wherein the first fixing portion is quadrangular having four peripheral portions, and one of the four peripheral portions located at a boundary portion with respect to the
15 second fixing portion is not provided with a fixing member but only the remaining three peripheral portions are provided with the fixing member while its central portion is formed as an unfixed clearance portion.

20 6. The semiconductor power module as claimed in Claim 5, wherein in the three peripheral portions of the first fixing portions, a width of an opposite peripheral portion located on an opposite side of the boundary with respect to the second fixing portion is larger than a width of the
25 remaining two peripheral portions of the first fixing

portion.